इंटरनेट मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”
Mazdoor Kisan Shakti Sangathan
“The Right to Information, The Right to Live”

“पुराने को छोड नये के तरफ”
Jawaharlal Nehru
“Step Out From the Old to the New”

IS 14180 (1994): Graphical symbols for electrical equipment in medical practice [MHD 19: Immuno-Biological Diagnostic Kits]

“ज्ञान से एक नये भारत का निर्माण”
Satyanarayan Gangaram Pitroda
“Invent a New India Using Knowledge”

Act Number 22 of 2005
The Indian Parliament
RIGHT TO INFORMATION

Made Available By
Public.Resource.Org

“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”
Bhartṛhari—Nītiśatakam
“Knowledge is such a treasure which cannot be stolen”

BLANK PAGE

BRUTUM FULMEN

IGNORANTIA JURIS NON EXCUSAT

PROTECTED BY COPYRIGHT

IS 14180 : 1994
IEC Pub 878 : 1988

(Reaffirmed 2000)

भारतीय मानक

चिकित्सीय पद्धति में प्रयुक्त वैद्युत उपस्कर के लिए ग्राफीय प्रतीक

Indian Standard

GRAPHICAL SYMBOLS FOR ELECTRICAL EQUIPMENT IN MEDICAL PRACTICE

UDC 003.62 : 615.478

© BIS 1994

BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

August 1994

Price Group 13

Electromedical Equipment Sectional Committee, MHD 19

CONTENTS

Clause

1. Scope and object 1
2. General 1

SECTION ONE — GENERAL SYMBOLS

3. Alphabetical index 2
4. Numerical index 3
5. Compilation 5

SECTION TWO — SYMBOLS TO IDENTITY THE CLASSIFICATION OF EQUIPMENT

6. Alphabetical index 16
7. Numerical index 16
8. Compilation 18

SECTION THREE — SAFETY SYMBOLS

9. Alphabetical index 20
10. Numerical index 20
11. Compilation 22

SECTION FOUR — SPECIALIZED SYMBOLS FOR IONIZING RADIATION EQUIPMENT

12. Alphabetical index 23
13. Numerical index 24
14. Compilation 26

SECTION FIVE — SPECIALIZED SYMBOLS FOR DISPLAY, COMMUNICATION AND RECORDING

15. Alphabetical index 37
16. Numerical index 38
17. Compilation 40

NATIONAL FOREWORD

This Indian Standard which is identical to IEC Pub 878 (1988) 'Graphical symbols for electrical equipment in medical practice (First Edition)', issued by the International Electrotechnical Commission (IEC) was adopted by the Bureau of Indian Standards on the recommendations of the Electromedical Equipment Sectional Committee and approval of the Medical Equipment and Hospital Planning Division Council.

(Continued on third cover)

Indian Standard

GRAPHICAL SYMBOLS FOR ELECTRICAL EQUIPMENT IN MEDICAL PRACTICE

1. Scope and object

This report provides a list, for easy reference, of graphical symbols for medical electrical equipment.

2. General

This report identifies those symbols already published in IEC Publication 417 or in ISO Standard 7000. A reference to the relevant symbol number is given.

Some symbols essential for compliance with the standards issued by IEC Technical Committee No. 62 or its Sub-Committees are also listed.

Many of the symbols listed in this report have already been used for several years on equipment and will be familiar to experts in that particular field; the meaning of others will become clear when viewed in context on the equipment itself, but it must be appreciated that it is impossible to make self-evident the meaning of all symbols on complex equipment.

However, it is to be noted that the meaning of all symbols used on equipment shall be explained in the accompanying documents to the equipment.

The symbols listed in this report are intended to be displayed on equipment used in medical practice. They are not necessarily associated with graphical symbols used on drawings.

For symbol requirements not met by this report, refer in the first instance to published IEC or ISO symbols. Note that, where necessary, two or more symbols or symbol elements may be grouped together to convey a particular meaning and, provided that the essential communicative characteristics of the basic symbol are maintained, some latitude in graphic design is permissible.

The symbols are grouped in sections for ease of reference (see Introduction).

The safety symbols in Section Three may be used to form safety signs according to local regulations, for example in a yellow triangle.

SECTION ONE – GENERAL SYMBOLS

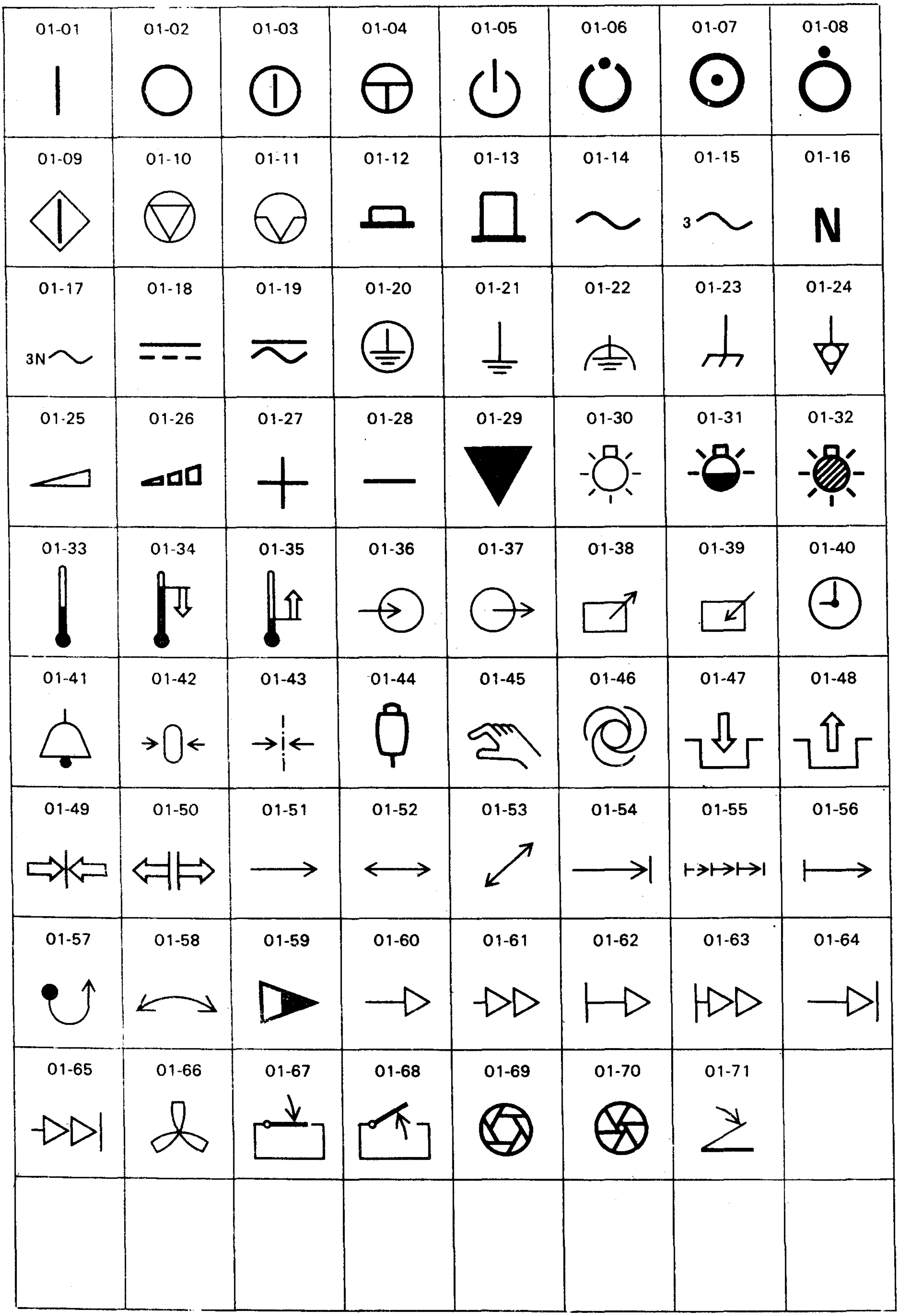
3. Alphabetical index

	Key words	Symbol No.
A.	Alternating current	01-14
	Automatic control (closed loop)	01-46
B.	[illegible]	01-41
	[illegible] direct and alternating current	01-19
C.	Calibration	01-29
	Clock; time switch; timer	01-40
	Close (a container)	01-67
	Connection point for the neutral conductor on permanently installed equipment	01-16
D.	Decreasing temperature	01-34
	Direct current	01-18
	Disengaging (mechanical deactivation)	01-48
E.	Earth (ground)	01-21
	Engaging (mechanical activation)	01-47
	Equipotentiality	01-24
F.	Fan (general)	01-66
	Fast run	01-61
	Fast run from a limit	01-63
	Fast run to a limit	01-65
	Foot switch	01-71
	Frame or chassis	01-23
H.	Hand-held switch	01-44
I.	Increasing temperature	01-35
	Indirect lighting	01-31
	"IN"-position of a bistable push control	01-12
	Input	01-36
	Iris diaphragm: closed	01-70
	Iris diaphragm: open	01-69
L.	Lamp; lighting; illumination	01-30
	Limited rectilinear motion	01-54
	Local control	01-39
	Lock or tighten	01-49
	Low intensity lighting	01-32
M.	Manual control	01-45
	Minus; negative polarity	01-28
	Movement in both directions	01-52
	Movement in direction of arrow from a pre-set position	01-56
	Movement in one direction	01-51
	Movement to and from the operator	01-53
N.	Noiseless (clean) earth (ground)	01-22
	Normal run	01-60
	Normal run from a limit	01-62
	Normal run to a limit	01-64
O.	Off (power)	01-02
	"OFF" only for a part of equipment	01-08
	On (power)	01-01
	On/off (push button)	01-04
	On/off (push-push)	01-03
	"ON" only for a part of equipment	01-07
	Open (a container)	01-68
	"OUT"-position of a bistable push control	01-13
	Output	01-37
P.	Pause; interruption	01-11
	Plus; positive polarity	01-27
	Protective earth (ground)	01-20
R.	Rectilinear repeated positioning	01-55
	Remote control	01-38
	Rotation in two directions	01-58
S.	Setting to central position	01-43
	Slow run	01-59
	Stand-by	01-05
	Stand-by or preparatory state for a part of equipment	01-06
	Start (of action)	01-09
	Stop (of action)	01-10
T.	Temperature	01-33
	Three phase alternating current	01-15
	Three phase alternating current with neutral conductor	01-17
U.	U-turn of movement (from a pre-set position)	01-57
	Unlock, unclamp	01-50
V.	Variability	01-25
	Variability in steps	01-26
Z.	Zero point adjustment	01-42

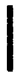
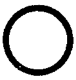
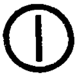
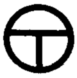
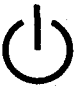
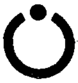
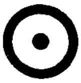
4. Numerical index

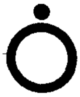
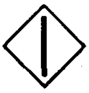
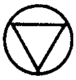
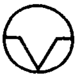
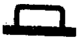
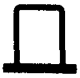
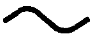
01-01	On (power)
01-02	Off (power)
01-03	On/off (push-push)
01-04	On/off (push button)
01-05	Stand-by
01-06	Stand-by or preparatory state for a part of equipment
01-07	"ON" only for a part of equipment
01-08	"OFF" only for a part of equipment
01-09	Start (of action)
01-10	Stop (of action)
01-11	Pause; interruption
01-12	"IN"-position of a bistable push control
01-13	"OUT"-position of a bistable push control
01-14	Alternating current
01-15	Three phase alternating current
01-16	Connection point for the neutral conductor on permanently installed equipment
01-17	Three phase alternating current with neutral conductor
01-18	Direct current
01-19	Both direct and alternating current
01-20	Protective earth (ground)
01-21	Earth (ground)
01-22	Noiseless (clean) earth (ground)
01-23	Frame or chassis
01-24	Equipotentiality
01-25	Variability
01-26	Variability in steps
01-27	Plus; positive polarity
01-28	Minus; negative polarity
01-29	Calibration
01-30	Lamp; lighting; illumination
01-31	Indirect lighting
01-32	Low intensity lighting
01-33	Temperature
01-34	Decreasing temperature
01-35	Increasing temperature
01-36	Input
01-37	Output
01-38	Remote control
01-39	Local control
01-40	Clock; time switch; timer
01-41	Bell
01-42	Zero point adjustment
01-43	Setting to central position
01-44	Hand-held switch
01-45	Manual control
01-46	Automatic control (closed loop)
01-47	Engaging (mechanical activation)
01-48	Disengaging (mechanical deactivation)
01-49	Lock or tighten
01-50	Unlock, unclamp
01-51	Movement in one direction
01-52	Movement in both directions
01-53	Movement to and from the operator
01-54	Limited rectilinear motion
01-55	Rectilinear repeated positioning
01-56	Movement in direction of arrow from a pre-set position
01-57	U-turn of movement (from a pre-set position)
01-58	Rotation in two directions
01-59	Slow run
01-60	Normal run
01-61	Fast run
01-62	Normal run from a limit
01-63	Fast run from a limit
01-64	Normal run to a limit
01-65	Fast run to a limit
01-66	Fan (general)
01-67	Close (a container)
01-68	Open (a container)
01-69	Iris diaphragm: open
01-70	Iris diaphragm: closed
01-71	Foot switch

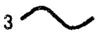
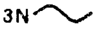
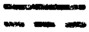
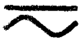
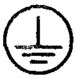
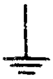
SECTION ONE – GENERAL SYMBOLS

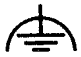
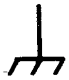
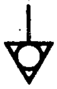
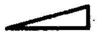
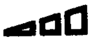
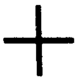
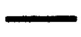


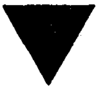
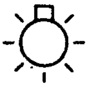
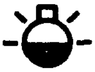
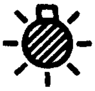
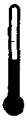
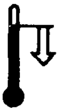
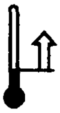
5. Compilation of Section One — General symbols

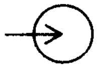
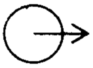
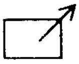
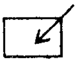
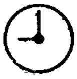
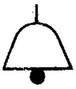
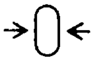
No.	Symbol	Title	Reference
01-01		On (power)	417-IEC 5007
01-02		Off (power)	417-IEC 5008
01-03		On/off (push-push)	417-IEC 5010
01-04		On/off (push button)	417-IEC 5011
01-05		Stand-by	417-IEC 5009
01-06		Stand-by or preparatory state for a part of equipment	417-IEC 5266
01-07		"ON" only for a part of equipment	417-IEC 5264

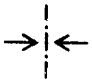
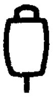
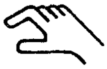
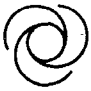
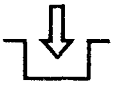
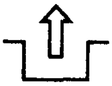
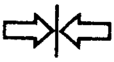
No.	Symbol	Title	Reference
01-08		"OFF" only for a part of equipment	417-IEC 5265
01-09		Start (of action)	417-IEC 5104
01-10		Stop (of action)	417-IEC 5110
01-11		Pause; interruption	417-IEC 5111
01-12		"IN"-position of a bistable push control	417-IEC 5268
01-13		"OUT"-position of a bistable push control	417-IEC 5269
01-14		Alternating current	417-IEC 5032

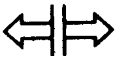
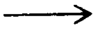
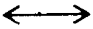
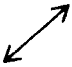
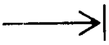
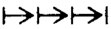
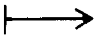
No.	Symbol	Title	Reference
01-15		Three phase alternating current	IEC 601-1
01-16	N	Connection point for the neutral conductor on permanently installed equipment	IEC 601-1
01-17		Three phase alternating current with neutral conductor	IEC 601-1
01-18		Direct current	417-IEC 5031
01-19		Both direct and alternating current	417-IEC 5033
01-20		Protective earth (ground)	417-IEC 5019
01-21		Earth (ground)	417-IEC 5017

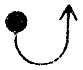
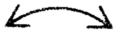
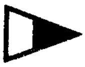
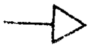
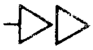
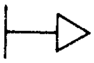
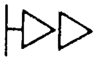
No.	Symbol	Title	Reference
01-22		Noiseless (clean) earth (ground)	417-IEC 5018
01-23		Frame or chassis	417-IEC 5020
01-24		Equipotentiality	417-IEC 5021
01-25		Variability	417-IEC 5004
01-26		Variability in steps	417-IEC 5181
01-27		Plus; positive polarity	417-IEC 5005
01-28		Minus; negative polarity	417-IEC 5006

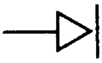
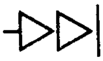
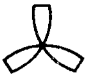
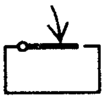
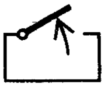
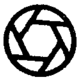
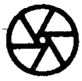
No.	Symbol	Title	Reference
01-29		Calibration	ISO 7000- 0160
01-30		Lamp; lighting; illumination	417-IEC 5012
01-31		Indirect lighting	417-IEC 5320
01-32		Low intensity lighting	417-IEC 5321
01-33		Temperature	) 7000- 4
01-34		Decreasing temperature	ISO 7000- 0036
01-35		Increasing temperature	ISO 7000- 0035

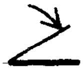
No.	Symbol	Title	Reference
01-36		Input	417-IEC 5034
01-37		Output	417-IEC 5035
01-38		Remote control	–
01-39		Local control	–
01-40		Clock; time switch; timer	417-IEC 5184
01-41		Bell	417-IEC 5013
01-42		Zero point adjustment	ISO 7000- DAD.1 0540

No.	Symbol	Title	Reference
01-43		Setting to central position	ISO/7000- DAD.1 0514
01-44		Hand-held switch	417-IEC 5322
01-45		Manual control	ISO 7000- 0096
01-46		Automatic control (closed loop)	ISO 7000- 0017
01-47		Engaging (mechanical activation)	ISO 7000- 0022
01-48		Disengaging (mechanical deactivation)	ISO 7000- 0023
01-49		Lock or tighten	ISO 7000- 0018

No.	Symbol	Title	Reference
01-50		Unlock, unclamp	ISO 7000- 0019
01-51		Movement in one direction	417-IEC 5022
01-52		Movement in both directions	417-IEC 5023
01-53		Movement to and from the operator	–
01-54		Limited rectilinear motion	ISO 7000- 0001
01-55		Rectilinear repeated positioning	ISO 7000- 0254
01-56		Movement in direction of arrow from a pre-set position	ISO 7000- DAD.1 0521

No.	Symbol	Title	Reference
01-57		U-turn of movement (from a pre-set position)	ISO/7000- DAD.1 0539
01-58		Rotation in two directions	ISO 7000- 0005
01-59		Slow run	417-IEC 5124
01-60		Normal run	417-IEC 5107
01-61		Fast run	417-IEC 5108
01-62		Normal run from a limit	–
01-63		Fast run from a limit	–

No.	Symbol	Title	Reference
01-64		Normal run to a limit	–
01-65		Fast run to a limit	–
01-66		Fan (general)	–
01-67		Close (a container)	ISO 7000- 0025
01-68		Open (a container)	ISO 7000- 0024
01-69		Iris diaphragm: open	417-IEC 5323
01-70		Iris diaphragm: closed	417-IEC 5324

No.	Symbol	Title	Reference
01-71		Foot switch	417-IEC 5114

SECTION TWO — SYMBOLS TO IDENTIFY THE CLASSIFICATION OF EQUIPMENT

6. Alphabetical index

Key words . . . Symbol No.

C. Category AP equipment (medical) 02-07
Category APG equipment (medical) 02-08
Class II equipment 02-01

D. Defibrillator-proof type BF equipment 02-04
Defibrillator-proof type CF equipment 02-06

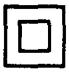
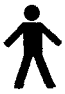
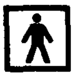
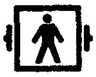
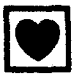
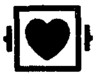
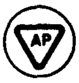
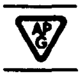
T. Type B equipment 02-02
Type BF equipment 02-03

Type CF equipment 02-05

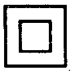
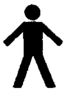
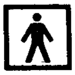
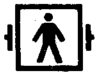
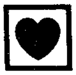
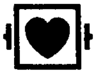
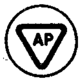
7. Numerical index

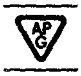
02-01	Class II equipment
02-02	Type B equipment
02-03	Type BF equipment
02-04	Defibrillator-proof type BF equipment
02-05	Type CF equipment
02-06	Defibrillator-proof type CF equipment
02-07	Category AP equipment (medical)
02-08	Category APG equipment (medical)

SECTION TWO — SYMBOLS TO IDENTIFY THE CLASSIFICATION OF EQUIPMENT

02-01	02-02	02-03	02-04	02-05	02-06	02-07	02-08
							

8. Compilation of Section Two — Symbols to identify the classification of equipment

No.	Symbol	Title	Reference
02-01		Class II equipment	417-IEC 5172
02-02		Type B equipment	601-1-IEC
02-03		Type BF equipment	417-IEC 5333
02-04		Defibrillator-proof type BF equipment	417-IEC 5334
02-05		Type CF equipment	417-IEC 5335
02-06		Defibrillator-proof type CF equipment	417-IEC 5336
02-07	 	Category AP equipment (medical)	417-IEC 5331

No.	Symbol	Title	Reference
02-08		Category APG equipment (medical)	417-IEC 5332

9. Alphabetical index

Key words — Symbol No.

C. Caution 03-02

D. Dangerous voltage 03-01

Disturbance 03-05

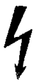
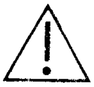
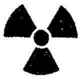
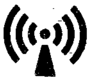
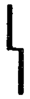
I. Ionizing radiation 03-03

N. Non-ionizing radiation 03-04

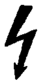
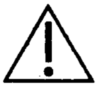
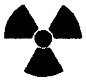
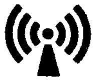
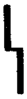
10. Numerical index

03-01 Dangerous voltage
03-02 Caution
03-03 Ionizing radiation
03-04 Non-ionizing radiation
03-05 Disturbance

SECTION THREE – SAFETY SYMBOLS

03-01 	03-02 	03-03 	03-04 	03-05 			

11. Compilation of Section Three — Safety symbols

No.	Symbol	Title	Reference
03-01		Dangerous voltage	417B-IEC 5036
03-02		Attention, consult accompanying documents	IEC 601-1
03-03		Ionizing radiation	ISO 361
03-04		Non-ionizing radiation	IEC 601-1
03-05		Disturbance	ISO 7000- 0228

SECTION FOUR – SPECIALIZED SYMBOLS FOR IONIZING RADIATION EQUIPMENT

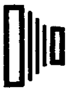
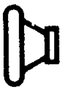
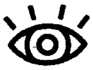
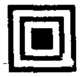
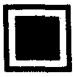
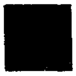
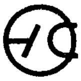
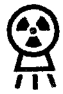
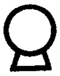
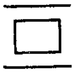
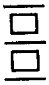
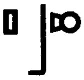
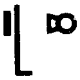
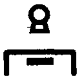
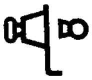
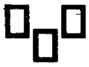
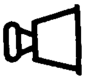
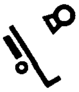
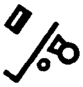
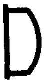
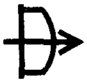
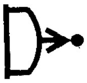
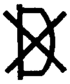
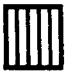
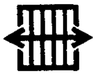
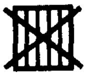
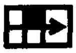
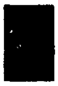
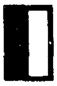
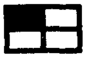
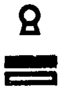
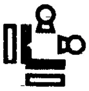
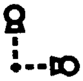
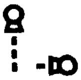
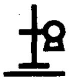
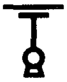
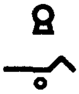
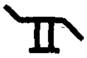
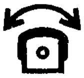
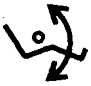
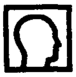
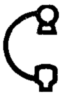
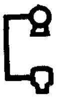
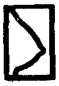
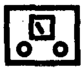
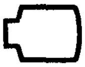
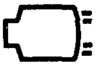
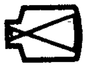
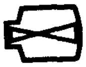
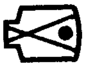
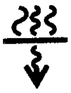
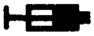
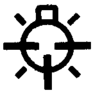
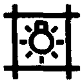
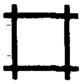
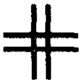
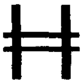
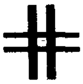
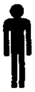
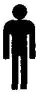
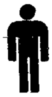
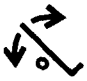
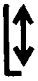
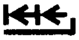
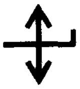
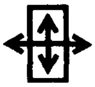
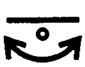
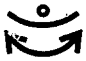
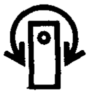
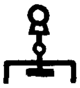
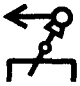
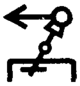
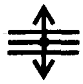
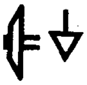
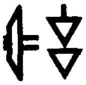
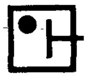
12. Alphabetical index

Key words	Symbol No.
A. Anode rotation: normal speed	04-74
Anode rotation: high speed	04-75
Anti-scatter grid	04-24
Anti-scatter grid: movement	04-25
Anti-scatter grid: not used	04-26
B. Beam limiting device: closed	04-56
Beam limiting device: open	04-55
Beam limiting device with separate closing of the shutters	04-58
Beam limiting device with separate opening of the shutters	04-57
C. Ceiling suspended radiological equipment	04-36
Craniographic equipment	04-41
E. Equipment for tomography	04-70
F. Film or cassette changer	04-31
Film or cassette changers: bi-plane operation	04-32
Floor mounted radiological equipment	04-35
H. Horizontal radiographic table	04-14
I. Indirect radiography	04-02
Injection syringe	04-52
Intermediate focal spot	04-05
Ionization chamber	04-76
L. Large focal spot	04-06
Light indicator of radiation field centre	04-53
Light indicator of the radiation field	04-54
M. Mammographic equipment	04-44
P. Patient's chair: rotation about a vertical axis	04-39
Patient's chair: tilt about a horizontal axis	04-40
Patient: normal	04-60
Patient: obese	04-61
Patient: thin	04-59
Patient cradle: rotation about its longitudinal axis	04-68
Patient support: longitudinal movement	04-63
Patient support: movements in its plane	04-66
Patient support: orthogonal movement to its plane	04-65
Patient support: rotation about a longitudinal axis	04-67
Patient support: rotation about an orthogonal axis	04-69
Patient support: stepwise movement	04-64
Patient support: tilting	04-62
Photo-fluorographic camera	04-17
Photo-fluorographic stand	04-15
Principal control panel	04-45
R. Radiation filter or filtration	04-51
Radiodiagnostic C-arm	04-42
Radiodiagnostic U-arm	04-43
Radiodiagnostic alternating bi-plane operation	04-34
Radiodiagnostic automatic control system	04-16
Radiodiagnostic compression device	04-20
Radiodiagnostic compression device: movement	04-21
Radiodiagnostic compression device: parked	04-23
Radiodiagnostic compression device: pressure applied	04-22
Radiodiagnostic simultaneous bi-plane operation	04-33
Radiodiagnostic urological table	04-37
Radiographic control	04-01
Radiographic film selection: division by four and orientation	04-30
Radiographic film selection: division by two and orientation	04-29
Radiographic film selection: full format and orientation	04-28
Radioscopy	04-03
S. Serial changer for single radiographic film	04-27
Serial exposure	04-11
Single exposure technique	04-10
Small focal spot	04-04
Surgical table	04-38
T. Tilting table with overtable X-ray source assembly	04-18
Tilting table with undertable X-ray source assembly	04-19
Tomographic layer selection	04-73
Tomographic movement without X-radiation	04-71
Tomographic movement with X-radiation	04-72
V. Vertical radiographic stand	04-13
Vertical radioscopic stand	04-12
X. X-ray image intensifier	04-46
X-ray image intensifier: full input field	04-48
X-ray image intensifier: gettering	04-50
X-ray image intensifier: reduced input field	04-49
X-ray image intensifier with stabilized input	04-47
X-ray source assembly	04-09
X-ray source assembly: emitting	04-08
X-ray tube	04-07

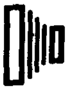
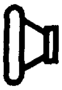
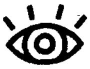
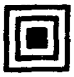
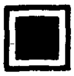
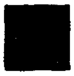
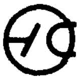
13. Numerical index

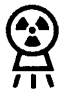
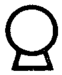
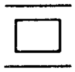
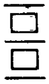
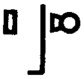
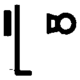
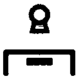
04-01	Radiographic control
04-02	Indirect radiography
04-03	Radioscopy
04-04	Small focal spot
04-05	Intermediate focal spot
04-06	Large focal spot
04-07	X-ray tube
04-08	X-ray source assembly: emitting
04-09	X-ray source assembly
04-10	Single exposure technique
04-11	Serial exposure
04-12	Vertical radioscopic stand
04-13	Vertical radiographic stand
04-14	Horizontal radiographic table
04-15	Photo-fluorographic stand
04-16	Radiodiagnostic automatic control system
04-17	Photo-fluorographic camera
04-18	Tilting table with overtable X-ray source assembly
04-19	Tilting table with undertable X-ray source assembly
04-20	Radiodiagnostic compression device
04-21	Radiodiagnostic compression device: movement
04-22	Radiodiagnostic compression device: pressure applied
04-23	Radiodiagnostic compression device: parked
04-24	Anti-scatter grid
04-25	Anti-scatter grid: movement
04-26	Anti-scatter grid: not used
04-27	Serial changer for single radiographic film
04-28	Radiographic film selection: full format and orientation
04-29	Radiographic film selection: division by two and orientation
04-30	Radiographic film selection: division by four and orientation
04-31	Film or cassette changer
04-32	Film or cassette changers: bi-plane operation
04-33	Radiodiagnostic simultaneous bi-plane operation
04-34	Radiodiagnostic alternating bi-plane operation
04-35	Floor mounted radiological equipment
04-36	Ceiling suspended radiological equipment
04-37	Radiodiagnostic urological table
04-38	Surgical table
04-39	Patient's chair: rotation about a vertical axis
04-40	Patient's chair: tilt about a horizontal axis
04-41	Craniographic equipment
04-42	Radiodiagnostic C-arm
04-43	Radiodiagnostic U-arm
04-44	Mammographic equipment
04-45	Principal control panel
04-46	X-ray image intensifier
04-47	X-ray image intensifier with stabilized input
04-48	X-ray image intensifier: full input field
04-49	X-ray image intensifier: reduced input field
04-50	X-ray image intensifier: gettering
04-51	Radiation filter or filtration
04-52	Injection syringe
04-53	Light indicator of radiation field centre
04-54	Light indicator of the radiation field
04-55	Beam limiting device: open
04-56	Beam limiting device: closed
04-57	Beam limiting device with separate opening of the shutters
04-58	Beam limiting device with separate closing of the shutters
04-59	Patient: thin
04-60	Patient: normal
04-61	Patient: obese
04-62	Patient support: tilting
04-63	Patient support: longitudinal movement
04-64	Patient support: stepwise movement
04-65	Patient support: orthogonal movement to its plane
04-66	Patient support: movements in its plane
04-67	Patient support: rotation about a longitudinal axis
04-68	Patient cradle: rotation about its longitudinal axis
04-69	Patient support: rotation about an orthogonal axis
04-70	Equipment for tomography
04-71	Tomographic movement without X-radiation
04-72	Tomographic movement with X-radiation
04-73	Tomographic layer selection
04-74	Anode rotation: normal speed
04-75	Anode rotation: high speed
04-76	Ionization chamber

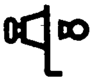
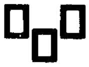
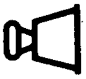
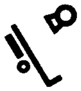
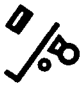
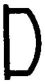
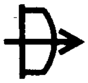
SECTION FOUR – SPECIALIZED SYMBOLS FOR IONIZING RADIATION EQUIPMENT

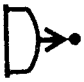
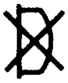
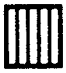
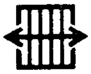
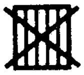
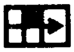
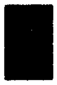
04-01 	04-02 	04-03 	04-04 	04-05 	04-06 	04-07 	04-08 
04-09 	04-10 	04-11 	04-12 	04-13 	04-14 	04-15 	04-16 
04-17 	04-18 	04-19 	04-20 	04-21 	04-22 	04-23 	04-24 
04-25 	04-26 	04-27 	04-28 	04-29 	04-30 	04-31 	04-32 
04-33 	04-34 	04-35 	04-36 	04-37 	04-38 	04-39 	04-40 
04-41 	04-42 	04-43 	04-44 	04-45 	04-46 	04-47 	04-48 
04-49 	04-50 	04-51 	04-52 	04-53 	04-54 	04-55 	04-56 
04-57 	04-58 	04-59 	04-60 	04-61 	04-62 	04-63 	04-64 
04-65 	04-66 	04-67 	04-68 	04-69 	04-70 	04-71 	04-72 
04-73 	04-74 	04-75 	04-76 				

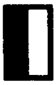
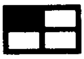
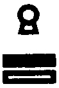
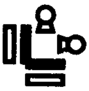
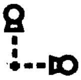
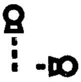
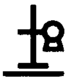
14. Compilation of Section Four — Specialized symbols for ionizing radiation equipment

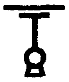
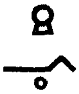
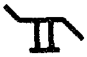
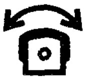
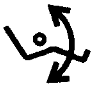
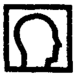
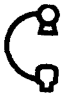
No.	Symbol	Title	Reference
04-01		Radiographic control	417-IEC 5328
04-02		Indirect radiography	417-IEC 5329
04-03		Radioscopy	417-IEC 5330
04-04		Small focal spot	417-IEC 5325
04-05		Intermediate focal spot	417-IEC 5326
04-06		Large focal spot	417-IEC 5327
04-07		X-ray tube	417-IEC 5337

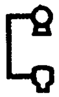
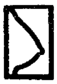
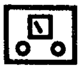
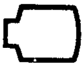
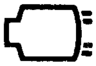
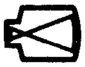
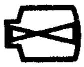
No.	Symbol	Title	Reference
04-08		X-ray source assembly: emitting	417-IEC 5339
04-09		X-ray source assembly	417-IEC 5338
04-10		Single exposure technique	–
04-11		Serial exposure	–
04-12		Vertical radioscopic stand	417-IEC 5340
04-13		Vertical radiographic stand	417-IEC 5341
04-14		Horizontal radiographic table	417-IEC 5342

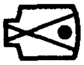
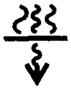
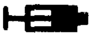
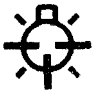
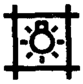
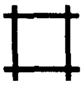
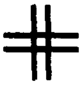
No.	Symbol	Title	Reference
04-15		Photo-fluorographic stand	417-IEC 5343
04-16		Radiodiagnostic automatic control system	417-IEC 5355
04-17		Photo-fluorographic camera	417-IEC 5344
04-18		Tilting table with overtable X-ray source assembly	417-IEC 5346
04-19		Tilting table with undertable X-ray source assembly	417-IEC 5347
04-20		Radiodiagnostic compression device	417-IEC 5348
04-21		Radiodiagnostic compression device: movement	417-IEC 5349

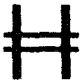
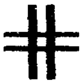
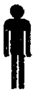
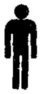
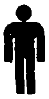
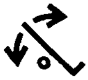
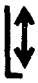
No.	Symbol	Title	Reference
04-22		Radiodiagnostic compression device: pressure applied	417-IEC 5350
04-23		Radiodiagnostic compression device: parked	417-IEC 5351
04-24		Anti-scatter grid	417-IEC 5352
04-25		Anti-scatter grid: movement	417-IEC 5353
04-26		Anti-scatter grid: not used	417-IEC 5353
04-27		Serial changer for single radiographic film	417-IEC 5356
04-28		Radiographic film selection: full format and orientation	417-IEC 5359

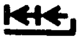
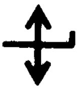
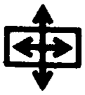
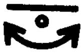
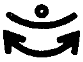
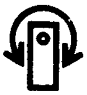
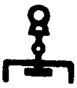
No.	Symbol	Title	Reference
04-29		Radiographic film selection: division by two and orientation	417-IEC 5360
04-30		Radiographic film selection: division by four and orientation	417-IEC 5361
04-31		Film or cassette changer	417-IEC 5362
04-32		Film or cassette changers: bi-plane operation	417-IEC 5363
04-33		Radiodiagnostic simultaneous bi-plane operation	417-IEC 5364
04-34		Radiodiagnostic alternating bi-plane operation	417-IEC 5365
04-35		Floor mounted radiological equipment	417-IEC 5366

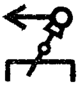
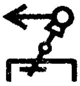
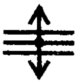
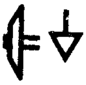
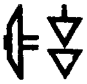
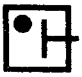
No.	Symbol	Title	Reference
04-36		Ceiling suspended radiological equipment	417-IEC 5367
04-37		Radiodiagnostic urological table	417-IEC 5368
04-38		Surgical table	417-IEC 5369
04-39		Patient's chair: rotation about a vertical axis	417-IEC 5370
04-40		Patient's chair: tilt about a horizontal axis	417-IEC 5371
04-41		Craniographic equipment	417-IEC 5372
04-42		Radiodiagnostic C-arm	417-IEC 5373

No.	Symbol	Title	Reference
04-43		Radiodiagnostic U-arm	417-IEC 5374
04-44		Mammographic equipment	417-IEC 5375
04-45		Principal control panel	417-IEC 5263
04-46		X-ray image intensifier	417-IEC 5376
04-47		X-ray image intensifier with stabilized input	417-IEC 5377
04-48		X-ray image intensifier: full input field	417-IEC 5378
04-49		X-ray image intensifier: reduced input field	417-IEC 5379

No.	Symbol	Title	Reference
04-50		X-ray image intensifier: gettering	417-IEC 5380
04-51		Radiation filter or filtration	417-IEC 5381
04-52		Injection syringe	417-IEC 5382
04-53		Light indicator of radiation field centre	417-IEC 5383
04-54		Light indicator of the radiation field	417-IEC 5384
04-55		Beam limiting device: open	417-IEC 5385
04-56		Beam limiting device: closed	417-IEC 5386

No.	Symbol	Title	Reference
04-57		Beam limiting device with separate opening of the shutters	417-IEC 5387
04-58		Beam limiting device with separate closing of the shutters	417-IEC 5388
04-59		Patient: thin	417-IEC 5389
04-60		Patient: normal	417-IEC 5390
04-61		Patient: obese	417-IEC 5391
04-62		Patient support: tilting	417-IEC 5392
04-63		Patient support: longitudinal movement	417-IEC 5393

No.	Symbol	Title	Reference
04-64		Patient support: stepwise movement	417-IEC 5394
04-65		Patient support: orthogonal movement to its plane	417-IEC 5395
04-66		Patient support: movements in its plane	417-IEC 5396
04-67		Patient support: rotation about a longitudinal axis	417-IEC 5397
04-68		Patient cradle: rotation about its longitudinal axis	417-IEC 5398
04-69		Patient support: rotation about an orthogonal axis	417-IEC 5399
04-70		Equipment for tomography	417-IEC 5345

No.	Symbol	Title	Reference
04-71		Tomographic movement without X-radiation	417-IEC 5401
04-72		Tomographic movement with X-radiation	417-IEC 5402
04-73		Tomographic layer selection	417-IEC 5403
04-74		Anode rotation: normal speed	417-IEC 5404
04-75		Anode rotation: high speed	417-IEC 5405
04-76		Ionization chamber	417-IEC 5406

SECTION FIVE – SPECIALIZED SYMBOLS FOR DISPLAY, COMMUNICATION AND RECORDING

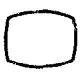
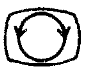
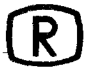
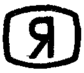
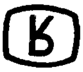
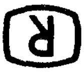
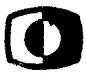
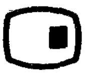
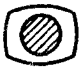
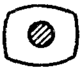
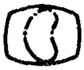
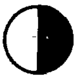
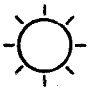
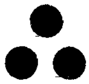
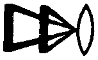
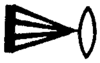
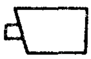
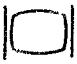
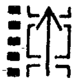
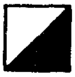
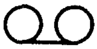
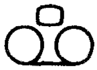
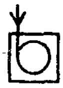
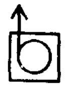
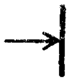
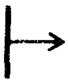
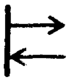
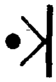
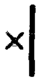
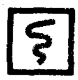
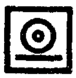
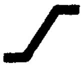
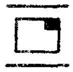
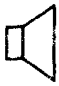
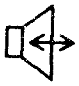
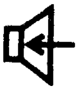
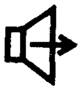
15. Alphabetical index

Key words	Symbol No.
B. Brightness; brilliance	05-13
C. Circular rotation	05-02
Colour (qualifying symbol)	05-14
Contrast	05-12
E. Electronic image: gamma control	05-32
Electronic image: inverted top-to-bottom	05-05
Electronic image: inverted top-to-bottom and reversal right-to-left	05-06
Electronic image: normal aspect	05-03
Electronic image: reference field	05-08
Electronic image: reversal black-to-white	05-07
Electronic image: reversal right-to left	05-04
Erasing from an information carrier	05-29
F. Feed magazine	05-24
Film blackening	05-20
Film movement	05-19
Film numbering or identification	05-33
G. Graphical recorder	05-30
L. Loudspeaker	05-34
Loudspeaker in operation as a microphone	05-36
Loudspeaker in operation as such	05-37
Loudspeaker/microphone	05-35
M. Marker	05-28
O. On video equipment: to identify contour enhancement	05-11
Optical focusing of TV camera	05-15
P. Printer	05-31
R. Reading or reproduction from an information carrier	05-26
Recording and play back	05-27
Recording on an information carrier	05-25
T. Take-up magazine	05-23
Tape recorder	05-21
Television camera	05-17
Television monitor	05-18
Television; video	05-01
TV automatic gain control: large reference field	05-09
TV automatic gain control: small reference field	05-10
TV camera zoom adjustment	05-16
V. Video tape recorder	05-22

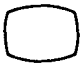
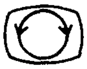
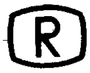
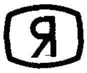
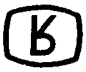
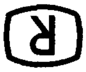
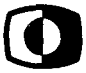
16. Numerical index

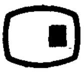
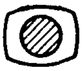
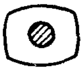
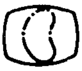
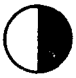
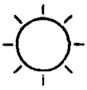
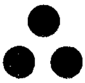
05-01	Television; video
05-02	Circular rotation
05-03	Electronic image: normal aspect
05-04	Electronic image: reversal right-to-left
05-05	Electronic image: inverted top-to-bottom
05-06	Electronic image: inverted top-to-bottom and reversal right-to-left
05-07	Electronic image: reversal black-to-white
05-08	Electronic image: reference field
05-09	TV automatic gain control: large reference field
05-10	TV automatic gain control: small reference field
05-11	On video equipment: to identify contour enhancement
05-12	Contrast
05-13	Brightness; brilliance
05-14	Colour (qualifying symbol)
05-15	Optical focussing of TV camera
05-16	TV camera zoom adjustment
05-17	Television camera
05-18	Television monitor
05-19	Film movement
05-20	Film blackening
05-21	Tape recorder
05-22	Video tape recorder
05-23	Take-up magazine
05-24	Feed magazine
05-25	Recording on an information carrier
05-26	Reading or reproduction from an information carrier
05-27	Recording and play back
05-28	Marker
05-29	Erasing from an information carrier
05-30	Graphical recorder
05-31	Printer
05-32	Electronic image: gamma control
05-33	Film numbering or identification
05-34	Loudspeaker
05-35	Loudspeaker/microphone
05-36	Loudspeaker in operation as a microphone
05-37	Loudspeaker in operation as such

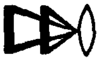
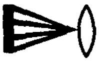
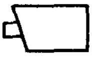
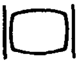
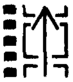
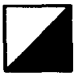
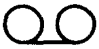
SECTION FIVE – SPECIALIZED SYMBOLS FOR DISPLAY, COMMUNICATION AND RECORDING

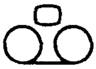
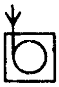
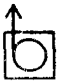
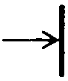
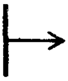
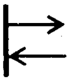
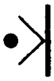
05-01 	05-02 	05-03 	05-04 	05-05 	05-06 	05-07 	05-08 
05-09 	05-10 	05-11 	05-12 	05-13 	05-14 	05-15 	05-16 
05-17 	05-18 	05-19 	05-20 	05-21 	05-22 	05-23 	05-24 
05-25 	05-26 	05-27 	05-28 	05-29 	05-30 	05-31 	05-32 
05-33 	05-34 	05-35 	05-36 	05-37 			

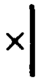
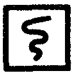
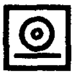
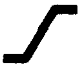
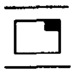
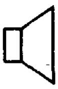
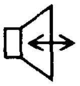
17. Compilation of Section Five — Specialized symbols for display, communication and recording

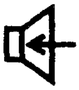
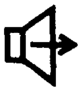
No.	Symbol	Title	Reference
05-01		Television; video	417-IEC 5049
05-02		Circular rotation	—
05-03		Electronic image: normal aspect	417-IEC 5407
05-04		Electronic image: reversal right-to-left	417-IEC 5408
05-05		Electronic image: inverted top-to-bottom	417-IEC 5409
05-06		Electronic image: inverted top-to-bottom and reversal right-to-left	417-IEC 5410
05-07		Electronic image: reversal black-to-white	417-IEC 5411

No.	Symbol	Title	Reference
05-08		Electronic image: reference field	417-IEC 5412
05-09		TV automatic gain control: large reference field	–
05-10		TV automatic gain control: small reference field	–
05-11		On video equipment: to identify contour enhancement	–
05-12		Contrast	417-IEC 5057
05-13		Brightness; brilliance	417-IEC 5056
05-14		Colour (qualifying symbol)	417-IEC 5048

No.	Symbol	Title	Reference
05-15		Optical focussing of TV camera	–
05-16		TV camera zoom adjustment	–
05-17		Television camera	417-IEC 5116
05-18		Television monitor	417-IEC 5051
05-19		Film movement	–
05-20		Film blackening	–
05-21		Tape recorder	417-IEC 5093

No.	Symbol	Title	Reference
05-22		Video tape recorder	417-IEC 5118
05-23		Take-up magazine	–
05-24		Feed magazine	–
05-25		Recording on an information carrier	417-IEC 5163
05-26		Reading or reproduction from an information carrier	417-IEC 5164
05-27		Recording and play back	–
05-28		Marker	417-IEC 5170

No.	Symbol	Title	Reference
05-29		Erasing from an information carrier	417-IEC 5165
05-30		Graphical recorder	417-IEC 5192
05-31		Printer	417-IEC 5193
05-32		Electronic image: gamma control	417-IEC 5413
05-33		Film numbering or identification	–
05-34		Loudspeaker	417-IEC 5080
05-35		Loudspeaker/microphone	417-IEC 5081

No.	Symbol	Title	Reference
05-36		Loudspeaker in operation as a microphone	417-IEC 5126
05-37		Loudspeaker in operation as such	417-IEC 5127

(Continued from second cover)

The text of IEC standard has been approved as suitable for publication as Indian Standard without deviations. Certain conventions are, however, not identical to those used in the Indian Standards. Attention is particularly drawn to the following:

> Wherever the words 'International Standard' or 'IEC Publication' appear referring to this standard, they should be read as 'Indian Standard'.

In this adopted standard, reference appears to IEC Pub 601-1 for which Indian Standard also exists. The corresponding Indian Standard which is identical to this IEC standard and is to be substituted in its place is IS 13450 (Part 1) : 1994 'Medical electrical equipment — General requirements for safety'

The technical committee responsible for the preparation of this standard has reviewed the provisions of following international standards referred to in this adopted standard and has decided that they are acceptable for use in conjunction with this standard:

IEC Pub 417 (1973) Graphical symbols for use on equipment. Index, survey and compilation of the single sheets

ISO 361 : 1975 Basic ionizing radiation symbol

ISO 7000 : 1984 Graphical symbols for use on equipment — Index and synopsis

Only the English language text of the International Standard has been retained while adopting it in this Indian Standard.

Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act, 1986* to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Director (Publications), BIS.

Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition. by referring to the latest issue of 'BIS Handbook' and 'Standards Monthly Additions'.

This Indian Standard has been developed from Doc No. MHD 19 (2596)

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002
Telephones : 331 01 31, 331 13 75

Telegram : Manaksanstha
(Common to all offices)

Regional Offices :

		Telephone
Central :	Manak Bhavan, 9 Bahadur Shah Zafar Marg NEW DELHI 110002	331 01 31 331 13 75
Eastern :	1/14 C. I. T. Scheme VII M, V. I. P. Road, Maniktola CALCUTTA 700054	37 84 99, 37 85 61 37 86 26, 37 86 62
Northern :	SCO 445-446, Sector 35-C, CHANDIGARH 160036	53 38 43, 53 16 40 53 23 84
Southern :	C. I. T. Campus, IV Cross Road, MADRAS 600113	235 02 16, 235 04 42 235 15 19, 235 23 15
Western :	Manakalaya, E9 MIDC, Marol, Andheri (East) BOMBAY 400093	632 92 95, 632 78 58 632 78 91, 632 78 92

Branches: AHMADABAD. BANGALORE BHOPAL BHUBANESHWAR. COIMBATORE. FARIDABAD. GHAZIABAD. GUWAHATI. HYDERABAD. JAIPUR. KANPUR. LUCKNOW. PATNA. THIRUVANANTHAPURAM.

Printed at Simco Printing Press, Delhi